Journal of Soil and Water Conservation

Index to Volume 22

All reviews of publications are listed under "Books Reviewed"; descriptive listings of current literature are not indexed by title; but the pages on which such listings occur are given under "Literature Listed."

ABRAHAMS, JOHN H., JR.: Solid Wastes—A National Conservation Problem, 201
AKIN, WALLACE E.: A Look at Iowa's Geology, 110
ALEXANDER, E. L.: Installation of Parallel Terraces in the Southwest, 191

Beautification
grants awarded to youth groups, 161
BERTRAND, ANSON R.: Conservation Research in the War on Hunger, 131
BIRD, RONALD: Reducing Liability Risks in Recreation Enterprises, 16
BLAKELY, B. D.: The Quality of America's Agricultural Land Reserves, 71

Books Reviewed
Advances in Corn Production (1966): W. H. Pierre, S. R. Aldrich and W. P. Martin, editors, 210
Alaska: A Challenge in Conservation (1966): Richard A. Cooley, 27
Alternatives in Water Management (1966): Committee on Water, Division of Earth Sciences, National Academy of Sciences, 75
Big Water Fight, The (1966): The League of Women Voters Education Fund, 76
Campaigns Against Hunger (1967): E. C. Stakman, Richard Bradfield and Paul C. Mangelsdorf, 209
Challenge of the Underdeveloped Nations, A Decade of Development, The (1967): James Avery Joyce, 158
Economics of Outdoor Recreation (1967): Marion Clawson and Jack L. Knetsch, 156
Geography of Soils, The (1965): B. T. Bunting, 158
Future Environments of North America (1966): F. Fraser Darling and John P. Milton, editors, 117
Guidelines to Conservation Education Action (1966): Izaak Walton League of America Conservation Education Committee, 157
Land and People in the Northern Plains Transition Area (1966): Howard W. Ottoson, Eleanor M. Birch, Philip A. Henderson and A. H. Anderson, 76
Life of the Forest, The (1966): Jack McCormick, 209
Origins of American Conservation (1966): Henry Clepper, editor, 254
Politics of Conservation, The (1966): Frank E. Smith, 26
Rivers and Watersheds in America's Future (1965): Elizabeth S. Helfman, 117
Scientific Aspects of Pest Control (1966): National Academy of Sciences, National Research Council, 156
Surface Mining and Our Environment (1967): Department of the Interior, 253
Systems Approach to Park Planning, A (1966): William J. Hart, 28
Wild Flowers of the United States—The Northeastern States, Volume I, Part I and II (1966): Harold William Rickett, 254
Wildlife Habitat Improvement (1966): Joseph J. Shomon, Byron L. Ashbaugh and Con D. Tolman, 76
BREWER, DURWARD (and GLENN A. GILLESPIE): Estimating Satisfaction Levels of Outdoor Recreationists, 248
BROWN, GEORGE W. (and JAMES T. KRYGIER): Changing Water Temperatures in Small Mountain Streams, 242
BURTON, JAMES D. (and WILLIAM T. PLASS): Pulpwood Production Potential on Strip-mined Land in the South, 235
BUSBY, C. E.: Aspects of American Sedimentation Law, 107
CARREKER, JOHN R. (and ADRIAN W. THOMAS and WALTER B. LEVERETTE): Soil Erosion on Tifton Loamy Sand, 245
CARTER, LUTHER J.: World Food Supply: PSAC Panel Warns of Impending Famine, 184
CARY, RICHARD E. (and LOUIS F. TWARDZIK): Liability Insurance for Rural Recreation Enterprises, 114
CHAWLA, V. K.: Quality of Irrigation Waters in Punjab, India, 206

Climatology and Meteorology
kinetic energy of rainfall, sources of error in calculating, 140
raindrop splash, parameters for describing, 91
weather modification, a new look at, 4

Conservation (general)
awards, 79, 160, 255
education, through state conservation education councils, 232
effective on low income farms, 153
persuasion, citizen action and public information needed to achieve, 152
research in the war on hunger, 131
viewpoint (editorial), 2, 42, 90, 130, 178, 226
CURTIS, WILLIE R.: Simple Practices Along Forest Edge Reduce Upland Runoff, 25
DENNIS, A. S.: A New Look at Weather Modification, 4
DIDERIKSEN, R. I.: A Look at Iowa's Soils, 112
DILS, R. E.: New Zealand: A Laboratory in Watershed Hydrology, 104
DOMINY, PERRY: Installation of Parallel Terraces in the Southeast, 189
DOTY, ROBERT D. (and ROBERT S. JOHNSTON): A Heating System for Stream Gaging Stations, 251
DOTZENKO, A. D. (and N. T. PAPAMICHOS and D. S. ROMINE): Effect of Recreational Use on Soil and Moisture Conditions in Rocky Mountain National Park, 196
DUFFY, PAUL D. (and D. C. MCCLURKIN): Stabilizing Gully Banks with Excelsior Mulch and Loblolly Pine, 70

Economics
surveys to evaluate and predict agriculture in a region, 62
trends in the structure of farming, 180

Education
intercollegiate soils contests, 155
library for conservation literature, 79
mounts for plants, 115
need for in agriculture, 30
outdoor laboratory for nature study, 31
resources management and outdoor recreation curriculum, 31, 213, 255
through state conservation education councils, 232
water resources school, Colorado, 255

Erosion, Soil (see also Wind Erosion)
creating erosion free topography, 54
effect on pollution, 228
geologic, in Nebraska, 207
in New Zealand, 104
on Tifton loamy sand, Georgia, 245
potential, estimating in developing countries, 147
research on raindrop splash, 91
stabilization of an eroded river bank, 249
tunneling in New Zealand, 149
FENZL, RICHARD N. (and JOHN L. GOODENOUGH): An Inexpensive Electrical Analog for Flow in Porous Media, 72

Fertilizers
phosphorus, effect on pollution, 228

Fish (see Wildlife)

Floods
grass survival in flood pool areas, 19
prevention by reservoirs, 255

Food Production Resources
"Food for Billions", 212
research on by USDA, 131
warning of impending famine by President's Science Advisory Committee, 184

Foreign
desalination plant in Holland, 212
education of farm youth in developing countries, FAO, 119
estimating potential erosion in developing countries, 147
New Zealand, a laboratory in watershed hydrology and management, 104
quality of irrigation water, Punjab, India, 206
restoration of open-cast coal sites in Great Britain, 101

Journal of Soil and Water Conservation

Index to Volume 22

All reviews of publications are listed under "Books Reviewed"; descriptive listings of current literature are not indexed by title; but the pages on which such listings occur are given under "Literature Listed."

ABRAHAMS, JOHN H., JR.: Solid Wastes—A National Conservation Problem, 201
AKIN, WALLACE E.: A Look at Iowa's Geology, 110
ALEXANDER, E. L.: Installation of Parallel Terraces in the Southwest, 191

Beautification
grants awarded to youth groups, 161
BERTRAND, ANSON R.: Conservation Research in the War on Hunger, 131
BIRD, RONALD: Reducing Liability Risks in Recreation Enterprises, 16
BLAKELY, B. D.: The Quality of America's Agricultural Land Reserves, 71

Books Reviewed
Advances in Corn Production (1966): W. H. Pierre, S. R. Aldrich and W. P. Martin, editors, 210
Alaska: A Challenge in Conservation (1966): Richard A. Cooley, 27
Alternatives in Water Management (1966): Committee on Water, Division of Earth Sciences, National Academy of Sciences, 75
Big Water Fight, The (1966): The League of Women Voters Education Fund, 76
Campaigns Against Hunger (1967): E. C. Stakman, Richard Bradfield and Paul C. Mangelsdorf, 209
Challenge of the Underdeveloped Nations, A Decade of Development, The (1967): James Avery Joyce, 158
Economics of Outdoor Recreation (1967): Marion Clawson and Jack L. Knetsch, 156
Geography of Soils, The (1965): B. T. Bunting, 158
Future Environments of North America (1966): F. Fraser Darling and John P. Milton, editors, 117
Guidelines to Conservation Education Action (1966): Izaak Walton League of America Conservation Education Committee, 157
Land and People in the Northern Plains Transition Area (1966): Howard W. Ottoson, Eleanor M. Birch, Philip A. Henderson and A. H. Anderson, 76
Life of the Forest, The (1966): Jack McCormick, 209
Origins of American Conservation (1966): Henry Clepper, editor, 254
Politics of Conservation, The (1966): Frank E. Smith, 26
Rivers and Watersheds in America's Future (1965): Elizabeth S. Helfman, 117
Scientific Aspects of Pest Control (1966): National Academy of Sciences, National Research Council, 156
Surface Mining and Our Environment (1967): Department of the Interior, 253
Systems Approach to Park Planning, A (1966): William J. Hart, 28
Wild Flowers of the United States—The Northeastern States, Volume I, Part I and II (1966): Harold William Rickett, 254
Wildlife Habitat Improvement (1966): Joseph J. Shomon, Byron L. Ashbaugh and Con D. Tolman, 76
BREWER, DURWARD (and GLENN A. GILLESPIE): Estimating Satisfaction Levels of Outdoor Recreationists, 248
BROWN, GEORGE W. (and JAMES T. KRYGIER): Changing Water Temperatures in Small Mountain Streams, 242
BURTON, JAMES D. (and WILLIAM T. PLASS): Pulpwood Production Potential on Strip-mined Land in the South, 235
BUSBY, C. E.: Aspects of American Sedimentation Law, 107
CARREKER, JOHN R. (and ADRIAN W. THOMAS and WALTER B. LEVERETTE): Soil Erosion on Tifton Loamy Sand, 245
CARTER, LUTHER J.: World Food Supply: PSAC Panel Warns of Impending Famine, 184
CARY, RICHARD E. (and LOUIS F. TWARDZIK): Liability Insurance for Rural Recreation Enterprises, 114
CHAWLA, V. K.: Quality of Irrigation Waters in Punjab, India, 206

Climatology and Meteorology
kinetic energy of rainfall, sources of error in calculating, 140
raindrop splash, parameters for describing, 91
weather modification, a new look at, 4

Conservation (general)
awards, 79, 160, 255
education, through state conservation education councils, 232
effective on low income farms, 153
persuasion, citizen action and public information needed to achieve, 152
research in the war on hunger, 131
viewpoint (editorial), 2, 42, 90, 130, 178, 226
CURTIS, WILLIE R.: Simple Practices Along Forest Edge Reduce Upland Runoff, 25
DENNIS, A. S.: A New Look at Weather Modification, 4
DIDERIKSEN, R. I.: A Look at Iowa's Soils, 112
DILS, R. E.: New Zealand: A Laboratory in Watershed Hydrology, 104
DOMINY, PERRY: Installation of Parallel Terraces in the Southeast, 189
DOTY, ROBERT D. (and ROBERT S. JOHNSTON): A Heating System for Stream Gaging Stations, 251
DOTZENKO, A. D. (and N. T. PAPAMICHOS and D. S. ROMINE): Effect of Recreational Use on Soil and Moisture Conditions in Rocky Mountain National Park, 196
DUFFY, PAUL D. (and D. C. MCCLURKIN): Stabilizing Gully Banks with Excelsior Mulch and Loblolly Pine, 70

Economics
surveys to evaluate and predict agriculture in a region, 62
trends in the structure of farming, 180

Education
intercollegiate soils contests, 155
library for conservation literature, 79
mounts for plants, 115
need for in agriculture, 30
outdoor laboratory for nature study, 31
resources management and outdoor recreation curriculum, 31, 213, 255
through state conservation education councils, 232
water resources school, Colorado, 255

Erosion, Soil (see also Wind Erosion)
creating erosion free topography, 54
effect on pollution, 228
geologic, in Nebraska, 207
in New Zealand, 104
on Tifton loamy sand, Georgia, 245
potential, estimating in developing countries, 147
research on raindrop splash, 91
stabilization of an eroded river bank, 249
tunneling in New Zealand, 149
FENZL, RICHARD N. (and JOHN L. GOODENOUGH): An Inexpensive Electrical Analog for Flow in Porous Media, 72

Fertilizers
phosphorus, effect on pollution, 228

Fish (see Wildlife)

Floods
grass survival in flood pool areas, 19
prevention by reservoirs, 255

Food Production Resources
"Food for Billions", 212
research on by USDA, 131
warning of impending famine by President's Science Advisory Committee, 184

Foreign
desalination plant in Holland, 212
education of farm youth in developing countries, FAO, 119
estimating potential erosion in developing countries, 147
New Zealand, a laboratory in watershed hydrology and management, 104
quality of irrigation water, Punjab, India, 206
restoration of open-cast coal sites in Great Britain, 101

tunneling erosion in New Zealand, 149
world food problem, 184
UN study of natural resources, 212

Forests
burned, rehabilitation in Idaho and Montana, 255
effect of timber cutting on water temperatures in small mountain streams, 242
fires, detection by electronic eye, 256
protection against insect pests, 119
pulpwood production potential on strip-mined land in the South, 235
simple practices reduce runoff from, 25
timber-yield increase planned, 119
FRISCHKNECHT, NEIL C.: How Far Will Halogeton Spread?, 135

Geology
of Iowa, 110
the landscape and geologic erosion in Nebraska, 207
GIFFORD, GERALD F.: Temporary Instrument Shelters for Hydrologic Studies, 25
GILLESPIE, GLENN A. (and DURWARD BREWER): Estimating Satisfaction Levels of Outdoor Recreationists, 248
GLICK, PHILIP M.: The Coming Transformation of the Soil Conservation District, 44
GOODENOUGH, JOHN L. (and RICHARD N. FENZL): An Inexpensive Analog for Flow in Porous Media, 72
GRAETZ, KARL E.: Plastic Plant Mounts, 115

Grasses
grassland conference, Nebraska, 79
survival in flood pool areas, 19
GRIGGS, GRADY E.: Installation and Operation of Farm Fish Raceways, 203

Groundwater
artificial recharge through wells, 11

Gully Control
bank stabilization with excelsior mulch and loblolly pine, 70
HARDY, ERNEST E. (and GERALD W. OLSON): Using Existing Information to Evaluate and Predict Agriculture in a Region, 62
HARROLD, L. L. (and G. B. TRIPLETT, JR., and R. E. YOUKER): Watershed Tests of No-tillage Corn, 98
HAUSER, V. L. (and F. B. LOTSPEICH): Artificial Groundwater Recharge through Wells, 11
HAWK, VIRGIL B. (and W. CURTIS SHARP): Sand Dune Stabilization Along the North Atlantic Coast, 143
HEADY, EARL O.: Trends in the Structure of Farming, 180
HOLLER, J. CARLISLE: Effective Education through State Advisory Conservation Education Councils, 232
HOSKING, PETER L.: Tunneling Erosion in New Zealand, 149

Hydrology
course in at M.I.T., 78
hydrologic soil surveys for wildland watersheds, 239
temporary instrument shelters for hydrologic studies, 25

Insecticides
for control of forest pests, 119
DDT movement in soil, 160
JACOBSON, PAUL: Keeping Soil and Water on the Farm, 54
JOHNSON, L. C. (and J. S. ROGERS, D. M. A. JONES and B. A. JONES JR.): Sources of Error in Calculating the Kinetic Energy of Rainfall, 140
JOHNSON, ROBERT S. (and ROBERT D. DOTY): A Heating System for Stream Gaging Stations, 251
JONES, B. A., JR. (and J. S. ROGERS, L. C. JOHNSON and D. M. A. JONES): Sources of Error in Calculating the Kinetic Energy of Rainfall, 140
JONES, D. M. A. (and J. S. ROGERS, L. C. JOHNSON and B. A. JONES, JR.): Sources of Error in Calculating the Kinetic Energy of Rainfall, 140
KELNHOFER, GUY J., JR.: A Prescription for Development Planning, 7
KNABACH, MARVIN L.: Using Range Lines to Prepare a Topographic Field Map, 194
KNUTSON, RUSSELL L.: Quick Evaluation of Watershed Potentials, 22
KRYGIER, JAMES T. (and GEORGE W. BROWN): Changing Water Temperatures in Small Mountain Streams, 242
KUNKLE, S. H. (and J. R. MEIMAN): Land Treatment and Water Quality Control, 67

Land Use
agricultural, prediction using existing information, 62
effect on water quality, 67
map for Europe proposed, 78
planning in Colorado to control abuse, 161
quality of U. S. agricultural land reserves, 71

Laws
sedimentation in U. S., 107
watershed zoning ordinance to protect streams, 256
LEVEN, ANDREW A. (and JOHN A. WILLIAMS): Hydrologic Soil Surveys for Wildland Watersheds, 239
LEVERETTE, WALTER B. (and ADRIAN W. THOMAS and JOHN R. CARREKER): Soil Erosion on Tifton Loamy Sand, 245

Literature Listed, 29, 77, 117, 159, 210
LIVINGSTON, JESSE B.: Installation of Parallel Terraces in the Midwest, 186
LOTSPEICH, F. B. (and V. L. HAUSER): Artificial Groundwater Recharge through Wells, 11
LOW, FRANK K.: Estimating Potential Erosion in Developing Countries, 147
MARSHALL, RAYMOND L. (and GERALD W. OLSON and JOHN E. WITTY): Intercollegiate Soils Contests, 155
MASINGALE, OBIE L.: Effective Resource Conservation on Low Income Farms, 153
MCCLURKIN, D. C. (and PAUL D. DUFFY): Stabilizing Gully Banks with Excelsior Mulch and Loblolly Pine, 70

Meetings and Conferences
American Society of Agronomy meeting, 212
arid lands conference, 212
grassland field day and conference, 79
Latin American Soil Biology Congress, 119
North American Wildlife and Natural Resources Conference, 160
Pollution and Our Environment Conference, Montreal, Quebec, 31
tillage conference, Detroit, 162
MEIMAN, J. R. (and S. H. KUNKLE): Land Treatment and Water Quality Control, 67

Mined Area Restoration
in Great Britain, 101
pulpwood production potential on strip-mined land in the South,235
in West Virginia, 119
MUTCHLER, CALVIN K.: Parameters for Describing Raindrop Splash,91
MYERS, LLOYD E.: Recent Advances in Water Harvesting, 95
NORTHROP, VERNON D.: The Delaware River Basin Commission, A Prototype in River Basin Development, 58
OLSON, GERALD W. (and ERNEST E. HARDY): Using Existing Information to Evaluate and Predict Agriculture in a Region, 62
OLSON, GERALD W. (and JOHN E. WITTY and RAYMOND L. MARSHALL): Intercollegiate Soils Contests, 155
PAPAMICHOS, N. T. (and A. D. DOTZENKO and D. S. ROMINE): Effect of Recreational Use on Soil and Moisture Characteristics in Rocky Mountain National Park, 196

Planning
development, a prescription for, 7

Plant Materials
for sand dune stabilization along the North Atlantic coast, 143, 198
important introductions, 205
PLASS, WILLIAM T. (and JAMES D. BURTON): Pulpwood Production Potential on Strip-mined Land in the South, 235

Pollution
air, method for measuring, 160
destroying small lakes, 212
from phosphorus fertilization of crops, 228
laboratory dedicated, Duluth, Minnesota, 213
plan for reduction in Lake Erie, 30
study in Canada, 31

Ponds
leakproofing with sodium carbonate, 256

Recreation
farm fish raceways, installation and operation, 203
first public domain recreation area, 255
hunting and fishing license revenue up, 120
liability insurance for rural enterprises, 114
outdoor, estimating satisfaction levels, 248
reducing liability risks in recreation enterprises, 16
use, effect of on soil and moisture conditions in Rocky Mountain National Park, 196
use of facilities increases, 160
vacation in the wilds, 119

Reservoirs
floods prevented by, 255
report describing 1,562 largest, 255
RHOADES, EDD D.: Grass Survival in Flood Pool Areas, 19

River Basin Development
prototype study, Delaware River, 58
ROGERS, J. S. (and L. C. JOHNSON, D. M. A. JONES and B. A. JONES, JR.): Sources of Error in Calculating the Kinetic Energy of Rainfall, 140
ROMINE, D. S. (and A. D. DOTZENKO and N. T. PAPAMICHOS): Effect of Recreational Use on Soil and Moisture Conditions in Rocky Mountain National Park, 196

Runoff
prevention on forest land, 25

Sedimentation
law governing in U. S., 107
reduced in Lake Mead, 120
SHARP, W. CURTIS (and VIRGIL B. HAWK): Sand Dune Stabilization Along the North Atlantic Coast, 143

Soil Conservation Districts
persuasion, citizen action and public information in conservation movements, 152
transformation of, 45

Soil Conservation Society of America
annual meeting, 81, 123, 217-219
chapter activities contest and awards, 217
chapter news, 38, 86, 125, 172, 222, 259
commendation awards, 170
committees and committee meetings, 37
council members and meetings, 36, 214
death of members, cover 3 (No. 2), 122, 128, 176, 224
elections, 121, 214, 257
fellows, 164, 221
financial report, 215
Gildea scholarship program and winners, 32, 171
headquarters activities, 34, 35
honorary members, 33, 166, 221
Journal award, 172
letters to the editor, cover 3 (No. 1), cover 3 (No. 4), cover 3 (No. 5), 261
membership and member news, 33, 40, 88, 121, 127, 162, 175, 223, 260
merit awards, 169
officers, 36
photo contest, 80, 215, 258
position statement, conservation problems in the urban-suburban environment, 123
position statement, conservation research, 82
position statement, education to advance the science and art of good land use, 216
position statement, guidelines for land use policies, 163
position statement, the training of the professional in resource conservation, 84
president's citations, 170
president's column and annual meeting addresses, 32, 80, 120, 178, 257
sustaining members, 220

Soils
judging contests, 155
moisture movement, electrical analog for studying, 72
of Iowa, 111
sampling undisturbed to 100 feet, 212
surveys, hydrologic for wildland watersheds, 239
surveys, use in evaluating and predicting agriculture in a region, 62

Stream Bank Stabilization
stabilization of an eroded river bank, 249

Stream Gaging
heating system for stream gaging stations, 251
STRIFFLER, W. DAVID: Restoration of Open-cast Coal Sites in Great Britain, 101
TABOR, PAUL: Fortunate Botanical "Stowaways", 204
TAUBE, CLARENCE M.: Stabilization of an Eroded River Bank, 249
TAYLOR, ALAN W.: Phosphorus and Water Pollution, 228

Terracing
and oil-base mulches as aids to tree and shrub establishment on coastal sand dunes, 198
parallel, installation of, 186
to control soil and water movement, 54
THOMAS, ADRIAN W. (and JOHN R. CARREKER and WALTER B. LEVERETTE): Soil Erosion on Tifton Loamy Sand, 245

Tillage
conference program, Detroit, 162
tests of no-tillage corn, 98
TRIPLETT, G. B., JR. (and L. L. HARROLD and R. E. YOUKER): Watershed Tests of No-tillage Corn, 98
TWARDIZIK, LOUIS F. (and RICHARD E. CARY): Liability Insurance for Rural Recreation Enterprises, 114
UNGER, DAVID G.: Persuasion, Citizen Action and Public Information, 152
WAGNER, JOACHIM (and JOHN M. ZAK): Oil-base Mulches and Terraces as Aids to Tree and Shrub Establishment on Coastal Sand Dunes, 198

Waste Disposal
a national conservation problem, 201
research on solid-waste disposal, 30, 161, 255

Water
desalination plant in Holland, 212
harvesting in Hawaii, 120
harvesting, recent advances in, 95
increasing yield from wildland watersheds, 239
loss through phreatophytes, 161
model to develop and manage water resources, 161
problems in California, 120
quality, affected by timber cutting, 242
quality, control, by land treatment, 67
quality for irrigation, Punjab, India, 206
quality standards for U. S., 213
resources research proposals evaluated, 78, 161, 213

Watersheds
awards, 78, 213
potentials, quick evaluation of, 22
tests of no-tillage corn, 98
wildland, hydrologic soil surveys for, 239

Weeds
halogeton, plant pest on western rangelands, 135
losses in crop production from, 79
pheatophytes and water loss, 161

Wildlife
farm fish raceways, installation and operation, 203
land retirement for, 213
lead poisoning in waterfowl, 30
nongame, management in Arizona, 256
wetlands preservation for, Canada, 79
WILLIAMS, JOHN A. (and ANDREW A. LEVEN): Hydrologic Soil Surveys for Wildland Watersheds, 239

Wind Erosion
sand dune stabilization, North Atlantic coast, 143, 198
WITTY, JOHN E. (and GERALD W. OLSON and RAYMOND L. MARSHALL): Intercollegiate Soils Contests, 155
WORTH, LARRY D.: The Landscape and Geologic Erosion, 207
YOUKER, R. E. (and L. L. HARROLD and G. B. TRIPLETT, JR.): Watershed Tests of No-tillage Corn, 98
ZAK, JOHN M. (and JOACHIM WAGNER): Oil-base Mulches and Terraces as Aids to Tree and Shrub Establishment on Coastal Sand Dunes, 198